

CLAIMS:

What is claimed is:

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1. A method in a data processing system for preventing exchange of viruses, the method comprising:
 - maintaining preexisting content for a device in a first location;
 - placing new data associated with the device in a second location, wherein the new information is an update to the preexisting content;
 - combining the preexisting data and the new content in a third location to form merged content; and
 - performing a check for viruses on the merged content prior to performing a transfer of the new content.
2. The method of claim 1 further comprising:
 - sending the merged content to the device if a virus is absent from the merged content.
3. The method of claim A1 further comprising:
 - storing the merged content as the preexisting content if a virus is absent from the merged content.

1 4. The method of claim 1, wherein the device is a wireless
2 device.

1 5. The method of claim 1, wherein the device is one of a
2 personal digital assistant, a laptop computer, a wireless
3 telephone, and a personal computer.

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1 6. The method of claim 1, wherein the first location is a
2 hard disk drive in the data processing system.

1 7. The method of claim 1, wherein the first location is a
2 hard disk drive in a storage system remote to the data
3 processing system.

1 8. The method of claim 1, wherein the third location is a
2 random access memory in the data processing system.

1 9. The method of claim 1, wherein the steps of placing,
2 maintaining, and performing are initiated in response to a
3 synchronization process between the data processing system
4 and the device.

1 10. A method in a data processing system for preventing
2 transmission of viruses, comprising the steps of:

3 receiving a request to synchronize a device;
4 identifying new content associated with the device;
5 combining the new content with existing content to form
6 merged content; and
7 checking the merged content for viruses prior to
8 synchronizing the device.

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1 11. The method of claim 10, wherein the new content is
2 content received from the device.

1 12. The method of claim 10, wherein the new content is
2 content to be sent to the device.

1 13. A data processing system comprising:
2 a bus system;
3 a memory connected to the bus system, wherein the memory
4 includes a set of instructions; and
5 a processing unit connected to the bus system, wherein
6 the processing unit executes the set of instructions to
7 maintain preexisting content for a device in a first
8 location, place new content associated with the device in a
9 second location, wherein the new information is an update to
10 the preexisting content, combine the preexisting content and

11 the new content in a third location to form merged content,
12 and perform a check for viruses on the merged content.

1 14. The data processing system of claim 13, wherein the bus
2 system includes a primary bus and a secondary bus.

1 15. The data processing system of claim 13, wherein the bus
2 system comprises a single bus.

1 16. The data processing system of claim 13, wherein the
2 processing unit includes a plurality of processors.

1 17. The data processing system of claim 13, wherein the
2 processing unit includes a single processor.

1 18. A data processing system for preventing exchange of
2 viruses, the data processing system comprising:

3 maintaining means for maintaining preexisting content
4 for a device in a first location;

5 placing means for placing new content associated with
6 the device in a second location, wherein the new content is
7 an update to the preexisting content;

8 combining means for combining the preexisting content
9 and the new content in a third location to form merged
10 content; and

11 performing means for performing a check for viruses on
12 the merged content prior to performing a transfer of the new
13 content.

AI 1 19. The data processing system of claim 18 further
2 comprising:

3 sending means for sending the merged content to the
4 device if a virus is absent from the merged content.

1 20. The data processing system of claim 18 further
2 comprising:

3 storing means for storing the merged content as the
4 preexisting content if a virus is absent from the merged
5 content.

1 21. The data processing system of claim 18, wherein the
2 device is a wireless device.

1 22. The data processing system of claim 18, wherein the
2 device is one of a personal digital assistant, a laptop
3 computer, a wireless telephone, and a personal computer.

1 23. The data processing system of claim 18, wherein the
2 first location is a hard disk drive in the data processing
3 system.

1 24. The data processing system of claim 18, wherein the
2 first location is a hard disk drive in a storage system
3 remote to the data processing system.

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1 25. The data processing system of claim 18, wherein the
2 third location is a random access memory in the data
3 processing system.

1 26. The data processing system of claim 18, wherein the
2 steps of placing, maintaining, and performing are initiated
3 in response to a synchronization process between the data
4 processing system and the device.

1 27. A data processing system for preventing transmission of
2 viruses

3 receiving means for receiving a request to synchronize a
4 device;

5 identifying means for identifying new content associated
6 with the device;

7 combining means for combining the new content with
8 existing content to form merged content; and

9 checking means for checking the merged content for
10 viruses prior to synchronizing the device.

1 28. The data processing system of claim 27, wherein the new
2 content is content received from the device.

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1 29. The data processing system of claim 27, wherein the new
2 content is content to be sent to the device.

1 30. A computer program product in a computer readable medium
2 for use in a data processing system for preventing exchange
3 of viruses, the computer program product comprising:

4 first instructions for maintaining preexisting content
5 for a device in a first location;

6 second instructions for placing new content associated
7 with the device in a second location, wherein the new
8 information is an update to the preexisting content;

9 third instructions for combining the preexisting content
10 and the new content in a third location to form merged
11 content; and

12 fourth instructions for performing a check for viruses
13 on the merged content prior to performing a transfer of the
14 new content.

1 31. A computer program product in a computer readable medium
2 for use in a data processing system for preventing
3 transmission of viruses, the computer program product
4 comprising:

5 first instructions for receiving a request to
6 synchronize a device;

7 second instructions for identifying new content
8 associated with the device;

9 third instructions for combining the new content with
10 existing content to form merged content; and

11 fourth instructions for checking the merged content for
12 viruses prior to synchronizing the device.